

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Name of Applicant and Assignee: SUN MICROSYSTEMS, INC.  
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Commissioner for Patents  
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**REVOCATION AND SUBSTITUTION  
OF POWER OF ATTORNEY UNDER 37 C.F.R. §1.36**

Dear Sir:

Pursuant to 37 C.F.R. §1.36, Sun Microsystems, Inc., the applicant and assignee of the patent applications listed on the attached APPENDIX A, revokes all previous powers of attorney in the patent applications listed on the attached APPENDIX A, hereby appoints the following attorneys and/or agents assigned to the Customer Number listed below to prosecute the patent applications listed on the attached APPENDIX A, and to transact all business in the U.S. Patent and Trademark Office connected therewith:

Customer Number 32615

Please direct all correspondence and telephone calls concerning the patent applications listed on the attached APPENDIX A to:

Robert P. Lord  
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Further, please change the attorney/docket number corresponding to the patent applications listed in APPENDIX A from the attorney/docket number on file to that indicated on APPENDIX A.

The undersigned (whose title is supplied below) is empowered to sign this certificate on behalf of the above-identified applicant.

The undersigned hereby declares that all statements made herein of the undersigned's own knowledge are true, that all statements made on information and belief are believed to be true, and further, that these statements are made with the knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the patent applications listed on the attached APPENDIX A or any patents issuing thereon.

Signature:

John Ketchum

Dated:

1/26/09

Name:

John Ketchum

Title:

Assistant General Counsel

Sun Microsystems, Inc.

## **APPENDIX A**

**1. Patent Application/Serial No.:** 11/277,762

**Title:** MICROPROCESSOR ARCHITECTURE  
WITH RECONFIGURABLE  
FUNCTION UNITS

**Filed:** 3/29/2006

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 021731/0700

**Reference No:** 33227/220001; SUN080708-US-NP

**2. Patent Application/Serial No.:** 11/351,058

**Patent No.:** 7,412,570

**Title:** SMALL AND POWER-EFFICIENT  
CACHE THAT CAN PROVIDE DATA  
FOR BACKGROUND DMA DEVICES  
WHILE THE PROCESSOR IS IN A  
LOW-POWER STATE

**Filed:** 2/9/2006

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 017518/0156 (Inventors to Montalvo)

021171/0578 (Montalvo to Sun)

**Reference No:** 33227/221001; SUN080674

**3. Patent Application/Serial No.:** 11/559,069

**Title:** SMALL AND POWER-EFFICIENT CACHE THAT CAN PROVIDE DATA FOR BACKGROUND DMA DEVICES WHILE THE PROCESSOR IS IN A LOW-POWER STATE

**Filed:** 11/13/2006

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 020957/0434

**Reference No:** 33227/221002; SUN080674-US-CNT-1

**4. Patent Application/Serial No.:** 60/731,968

**Title:** ENHANCED RF DECODER SAVES POWER DURING UNNECESSARY READS

**Filed:** 10/31/2005

**Applicant:** Sun Microsystems, Inc.

**Reference No:** 33227/223000; SUN080662-US-PSP

**5. Patent Application/Serial No.:** 11/306,000

**Title:** SOFTWARE HINT TO SPECIFY THE PREFERRED BRANCH PREDICTION TO USE FOR A BRANCH INSTRUCTION

**Filed:** 12/16/2005

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 017518/0137

**Reference No:** 33227/224001; SUN080653

**6. Patent Application/Serial No.:** 11/279,880

**Title:** IMPROVED PREFETCH HARDWARE EFFICIENCY VIA PREFETCH HINT INSTRUCTIONS

**Filed:** 4/15/2006

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 018161/0754

**Reference No:** 33227/226001; SUN080665

**7. Patent Application/Serial No.:** 11/277,765

**Title:** THREAD MIGRATION AND RECONFIGURATION OF A MULTI-CORE PROCESSOR

**Filed:** 3/29/2006

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 021731/0700

**Reference No:** 33227/227001; SUN080651-US-NP-5

**8. Patent Application/Serial No.:** 11/645,901

**Title:** PREDICTION OF DATA VALUES READ FROM MEMORY BY A MICROPROCESSOR USING A DYNAMIC CONFIDENCE THRESHOLD

**Filed:** 12/26/2006

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 020957/0434

**Reference No:** 33227/229001; SUN080843

**9. Patent Application/Serial No.:** 11/645,917

**Title:** LOW-POWER PREDICTION OF DATA VALUES READ FROM MEMORY BY A MICROPROCESSOR

**Filed:** 12/26/2006

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 020957/0434

**Reference No:** 33227/230001; SUN080824

**10. Patent Application/Serial No.:** 11/645,935

**Title:** PREDICTION OF DATA VALUES READ FROM MEMORY BY A MICROPROCESSOR USING SELECTIVE TABLE ENTRY REPLACEMENT

**Filed:** 12/26/2006

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 020957/0434

**Reference No:** 33227/231001; SUN080823

**11. Patent Application/Serial No.:** 11/561,287

**Title:** EXECUTING FUNCTIONS DETERMINED VIA A COLLECTION OF OPERATIONS FROM TRANSLATED INSTRUCTIONS

**Filed:** 11/17/2006

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 021731/0700

**Reference No:** 33227/235001; SUN080680

**12. Patent Application/Serial No.:** 11/646,008

**Title:** PREDICTION OF DATA VALUES READ FROM MEMORY BY A MICROPROCESSOR USING THE STORAGE DESTINATION OF A LOAD OPERATION

**Filed:** 12/26/2006

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 020957/0434

**Reference No:** 33227/236001; SUN080825

**13. Patent Application/Serial No.:** 11/561,281

**Title:** FUSING REGISTER OPERATIONS OF A TARGET ARCHITECTURE OPERATION SET

**Filed:** 11/17/2006

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 021731/0700

**Reference No:** 33227/237001; SUN080680

**14. Patent Application/Serial No.:** 60/707,070

**Title:** ADAPTIVE COMPUTING ENSEMBLE MICROPROCESSOR ARCHITECTURE

**Filed:** 8/10/2005

**Applicant:** Sun Microsystems, Inc.

**Reference No:** 33227/254001; SUN080651

**15. Patent Application/Serial No.:** 60/751,398

**Title:** ADAPTIVE COMPUTING ENSEMBLE  
MICROPROCESSOR ARCHITECTURE

**Filed:** 12/17/2005

**Applicant:** Sun Microsystems, Inc.

**Reference No:** 33227/255001; SUN080707

**16. Patent Application/Serial No.:** 60/758,485

**Title:** MICROPROCESSOR ARCHITECTURE  
WITH RECONFIGURABLE  
FUNCTION UNITS

**Filed:** 1/10/2006

**Applicant:** Sun Microsystems, Inc.

**Reference No:** 33227/256001; SUN080690

**17. Patent Application/Serial No.:** 60/759,484

**Title:** ADAPTIVE COMPUTING ENSEMBLE  
MICROPROCESSOR ARCHITECTURE

**Filed:** 1/17/2006

**Applicant:** Sun Microsystems, Inc.

**Reference No:** 33227/257001; SUN080708

**18. Patent Application/Serial No.:** 60/777,015

**Title:** ADAPTIVE COMPUTING ENSEMBLE  
MICROPROCESSOR ARCHITECTURE

**Filed:** 2/25/2006

**Applicant:** Sun Microsystems, Inc.

**Reference No:** 33227/258001; SUN080709

**19. Patent Application/Serial No.:** 11/277,761

**Title:** ADAPTIVE COMPUTING ENSEMBLE  
MICROPROCESSOR ARCHITECTURE

**Filed:** 3/29/2006

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 021731/0700

**Reference No:** 33227/259001; SUN080707

**20. Patent Application/Serial No.:** 11/781,726

**Title:** VIRTUAL CORE MANAGEMENT

**Filed:** 7/23/2007

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 020957/0434

**Reference No:** 33227/259002; SUN080835-US-CIP1

**21. Patent Application/Serial No.:** 60/832,823

**Title:** MANAGING MULTIPLE PHYSICAL CORE PROCESSORS TO BEHAVE AS ONE VIRTUAL CORE PROCESSOR

**Filed:** 7/23/2006

**Applicant:** Sun Microsystems, Inc.

**Reference No:** 33227/259003; SUN080835

**22. Patent Application/Serial No.:** 11/277,763

**Title:** STATICALLY CONFIGURED MICROPROCESSOR ARCHITECTURE

**Filed:** 3/29/2006

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 021731/0700

**Reference No:** 33227/260001; SUN080709-US-NP

**23. Patent Application/Serial No.:** 11/277,764

**Title:** CONFIGURABLE MULTI-CORE PROCESSOR IMPLEMENTING VIRTUAL PROCESSORS

**Filed:** 3/29/2006

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 021731/0700

**Reference No:** 33227/261001; SUN080651-US-NP-4

**24. Patent Application/Serial No.:** 60/730,550

**Title:** CHECKPOINTING STATUS FLAGS FOR ATOMIC TRACES

**Filed:** 10/26/2005

**Applicant:** Sun Microsystems, Inc.

**Reference No:** 33227/262001; SUN080660-US-PSP

**25. Patent Application/Serial No.:** 60/730,810

**Title:** ALLOCATION AND DEALLOCATION OF SHADOW REGISTERS USED BY ATOMIC TRACES

**Filed:** 10/27/2005

**Applicant:** Sun Microsystems, Inc.

**Reference No:** 33227/263001; SUN080661-US-PSP

**26. Patent Application/Serial No.:** 60/731,962

**Title:** DETERMINING THE HIGHEST PRIORITY ABORT TRIGGER IN AN ATOMIC TRACE

**Filed:** 10/31/2005

**Applicant:** Sun Microsystems, Inc.

**Reference No:** 33227/264001; SUN080691-US-PSP

**27. Patent Application/Serial No.:** 60/732,438

**Title:** ZERO-CYCLE EXECUTION OF  
CLEAR OPERATION AND  
AUTOMATIC REGISTER FREE

**Filed:** 11/1/2005

**Applicant:** Sun Microsystems, Inc.

**Reference No:** 33227/265001; SUN080669-US-PSP

**28. Patent Application/Serial No.:** 60/832,822

**Title:** MICROPROCESSOR WITH  
COHERENT CACHES FOR BASIC  
BLOCKS AND TRACES

**Filed:** 7/23/2006

**Applicant:** Sun Microsystems, Inc.

**Reference No:** 33227/268001; SUN080753-US-PSP

**29. Patent Application/Serial No.:** 60/863,125

**Title:** METHOD FOR EARLY  
DEALLOCATION OF PHYSICAL  
REGISTERS WHEN SHADOW  
REGISTERS ARE USED

**Filed:** 10/26/2006

**Applicant:** Sun Microsystems, Inc.

**Reference No:** 33227/266001; SUN080683-US-PSP

**30. Patent Application/Serial No.:** 60/832,848

**Title:** MICROPROCESSOR WITH CACHES FOR INSTRUCTIONS, BASIC BLOCKS, AND TRACES

**Filed:** 7/23/2006

**Applicant:** Sun Microsystems, Inc.

**Reference No:** 33227/267001; SUN080752-US-PSP

**31. Patent Application/Serial No.:** 60/862,609

**Title:** EXCEPTION HANDLING FOR ATOMIC TRACES

**Filed:** 10/24/2006

**Applicant:** Sun Microsystems, Inc.

**Reference No:** 33227/269001; SUN080693-US-PSP

**32. Patent Application/Serial No.:** 60/866,205

**Title:** PROCESSOR WITH OPTIMIZED OPERATION SEQUENCES FOR BASIC BLOCK AND MULTI-BLOCK TRACE CACHES

**Filed:** 11/16/2006

**Applicant:** Sun Microsystems, Inc.

**Reference No:** 33227/270001; SUN080694-US-PSP

**33. Patent Application/Serial No.:** 60/866,203

**Title:** PROCESSOR WITH BASIC BLOCK AND MULTI-BLOCK TRACE CACHES

**Filed:** 11/16/2006

**Applicant:** Sun Microsystems, Inc.

**Reference No:** 33227/271001; SUN080695-US-PSP

**34. Patent Application/Serial No.:** 11/553,453

**Title:** CHECKPOINTING FLAGS DURING ATOMIC TRACE RENAMING

**Filed:** 10/26/2006

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 018887/0247

**Reference No:** 33227/272001; SUN080660-US-NP-1

**35. Patent Application/Serial No.:** 11/553,458

**Title:** FLAG RESTORATION FROM CHECKPOINTS FOR ABORTS OF ATOMIC TRACES

**Filed:** 10/26/2006

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 018887/0247

**Reference No:** 33227/273001; SUN080660-US-NP-3

**36. Patent Application/Serial No.:** 11/553,455

**Title:** CHECKPOINTING FLAGS ON-DEMAND FOR ATOMIC TRACES

**Filed:** 10/26/2006

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 021731/0700

**Reference No:** 33227/274001; SUN080660-US-NP-2

**37. Patent Application/Serial No.:** 60/736,632

**Title:** POWER CONSERVATION VIA DRAM ACCESS REDUCTION

**Filed:** 11/15/2005

**Applicant:** Sun Microsystems, Inc.

**Reference No:** 33227/275001; SUN080670-US-PSP

**38. Patent Application/Serial No.:** 60/736,736

**Title:** SMALL AND POWER-EFFICIENT CACHE THAT CAN PROVIDE DATA FOR BACKGROUND DMA DEVICES WHILE THE PROCESSOR IS IN A LOW-POWER STATE

**Filed:** 11/15/2005

**Applicant:** Sun Microsystems, Inc.

**Reference No:** 33227/276001; SUN080674-US-PSP

**39. Patent Application/Serial No.:** 60/761,220  
**Title:** POWER CONSERVATION VIA DRAM ACCESS REDUCTION  
**Filed:** 1/23/2006  
**Applicant:** Sun Microsystems, Inc.  
**Reference No:** 33227/277001; SUN080671-US-PSP

**40. Patent Application/Serial No.:** 60/761,925  
**Title:** SMALL AND POWER-EFFICIENT CACHE THAT CAN PROVIDE DATA FOR BACKGROUND DMA DEVICES WHILE THE PROCESSOR IS IN A LOW-POWER STATE  
**Filed:** 1/25/2006  
**Applicant:** Sun Microsystems, Inc.  
**Reference No:** 33227/278001; SUN080679-US-PSP

**41. Patent Application/Serial No.:** 11/351,070  
**Title:** POWER CONSERVATION VIA DRAM ACCESS REDUCTION  
**Filed:** 2/9/2006  
**Applicant:** Sun Microsystems, Inc.  
**Reel/Frame No.:** 021171/0578  
**Reference No:** 33227/279001; SUN080670-US-NP

**42. Patent Application/Serial No.:** 11/559,133

**Title:** POWER CONSERVATION VIA DRAM ACCESS REDUCTION

**Filed:** 11/13/2006

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 020957/0434

**Reference No:** 33227/279002; SUN080670-US-CNT-1

**43. Patent Application/Serial No.:** 11/559,192

**Title:** POWER CONSERVATION VIA DRAM ACCESS

**Filed:** 11/13/2006

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 019355/0223

**Reference No:** 33227/279003; SUN080670-US-CIP

**44. Patent Application/Serial No.:** 12/030,846

**Title:** TRACE BASED DEALLOCATION OF ENTRIES IN A VERSIONING CACHE CIRCUIT

**Filed:** 2/13/2008

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 020957/0434

**Reference No:** 33227/282002; SUN080742-US-CIP-8

**45. Patent Application/Serial No.:** 12/030,851

**Title:** MEMORY ORDERING QUEUE / VERSIONING CACHE CIRCUIT

**Filed:** 2/13/2008

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 020957/0434

**Reference No:** 33227/282003; SUN080742-US-CIP-7

**46. Patent Application/Serial No.:** 12/030,852

**Title:** TRACE BASED ROLLBACK OF A SPECULATIVELY UPDATED CACHE

**Filed:** 2/13/2008

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 020957/0434

**Reference No:** 33227/282004; SUN080742-US-CIP-9

**47. Patent Application/Serial No.:** 12/030,854

**Title:** MEMORY RECONCILIATION BLOCK

**Filed:** 2/13/2008

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 020957/0434

**Reference No:** 33227/282005; SUN080742-US-CIP-6

**48. Patent Application/Serial No.:** 12/030,857

**Title:** MEMORY ORDERING QUEUE TIGHTLY COUPLED WITH A VERSIONING CACHE CIRCUIT

**Filed:** 2/13/2008

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 020957/0434

**Reference No:** 33227/282006; SUN080742-US-CIP-10

**49. Patent Application/Serial No.:** 60/721,385

**Title:** EFFICIENT TRACE CACHE MANAGEMENT DURING SELF-MODIFYING CODE PROCESSING

**Filed:** 9/28/2005

**Applicant:** Sun Microsystems, Inc.

**Reference No:** 33227/283001; SUN080652-US-PSP

**50. Patent Application/Serial No.:** 11/535,971

**Title:** EFFICIENT TRACE CACHE MANAGEMENT DURING SELF-MODIFYING CODE PROCESSING

**Filed:** 9/27/2006

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 021731/0700

**Reference No:** 33227/283002; SUN080652-US-NP-1

**51. Patent Application/Serial No.:** 11/535,972

**Title:** SELECTIVE TRACE CACHE  
INVALIDATION FOR SELF-  
MODIFYING CODE VIA MEMORY  
AGING

**Filed:** 9/27/2006

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 021731/0700

**Reference No:** 33227/283003; SUN080652-US-NP-2

**52. Patent Application/Serial No.:** 11/535,977

**Title:** TRACE CACHE FOR EFFICIENT  
SELF-MODIFYING CODE  
PROCESSING

**Filed:** 9/27/2006

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 021731/0700

**Reference No:** 33227/283004; SUN080652-US-NP-3

**53. Patent Application/Serial No.:** 11/781,949

**Title:** METHOD AND SYSTEM FOR  
PROMOTING TRACES IN AN  
INSTRUCTION PROCESSING  
CIRCUIT

**Filed:** 7/24/2007

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 021731/0700

**Reference No:** 33227/283005; SUN080752

**54. Patent Application/Serial No.:** 11/782,140

**Title:** METHOD AND SYSTEM FOR PROMOTING TRACES IN AN INSTRUCTION PROCESSING CIRCUIT

**Filed:** 7/24/2007

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 021731/0700

**Reference No:** 33227/283006; SUN080752-US-CIP-2

**55. Patent Application/Serial No.:** 11/782,163

**Title:** MICROPROCESSOR WITH COHERENT CACHES FOR BASIC BLOCKS AND TRACES

**Filed:** 7/24/2007

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 020957/0434

**Reference No:** 33227/283007; SUN080753-US-CIP-1

**56. Patent Application/Serial No.:** 11/781,950

**Title:** TRACE UNIT WITH A DECODER, A BASIC-BLOCK CACHE, AND A MULTI-BLOCK CACHE

**Filed:** 7/24/2007

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 020957/0434

**Reference No:** 33227/283008; SUN080744-US-CIP-1

**57. Patent Application/Serial No.:** 11/880,862

**Title:** TRACE UNIT WITH A DECODER, A BASIC-BLOCK CACHE, A MULTI-BLOCK CACHE, AND SEQUENCER

**Filed:** 7/23/2007

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 020957/0434

**Reference No:** 33227/283009; SUN080745-US-CIP-2

**58. Patent Application/Serial No.:** 11/781,937

**Title:** TRACE UNIT WITH A DECODER, A BASIC-BLOCK BUILDER, AND A MULTI-BLOCK BUILDER

**Filed:** 7/23/2007

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 020957/0434

**Reference No:** 33227/285001; SUN080742-US-CIP-0

**59. Patent Application/Serial No.:** 11/923,638

**Title:** GRACEFUL DEGRADATION IN A TRACE-BASED PROCESSOR

**Filed:** 10/24/2007

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 020957/0434

**Reference No:** 33227/285002; SUN080742-US-CIP-1

**60. Patent Application/Serial No.:** 11/923,640

**Title:** ABORT PRIORITIZATION IN A TRACE-BASED PROCESSOR

**Filed:** 10/24/2007

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 020957/0434

**Reference No:** 33227/285003; SUN080742-US-CIP-2

**61. Patent Application/Serial No.:** 11/941,900

**Title:** FLAG OPTIMIZATION OF A TRACE

**Filed:** 11/16/2007

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 020957/0434

**Reference No:** 33227/285004; SUN080742-US-CIP-3

**62. Patent Application/Serial No.:** 11/941,908

**Title:** EMIT VECTOR OPTIMIZATION OF A TRACE

**Filed:** 11/16/2007

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 020957/0434

**Reference No:** 33227/285005; SUN080742-US-CIP-4

**63. Patent Application/Serial No.:** 11/941,912

**Title:** SYMBOLIC RENAMING  
OPTIMIZATION OF A TRACE

**Filed:** 11/16/2007

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 020957/0434

**Reference No:** 33227/285006; SUN080742-US-CIP-5

**64. Patent Application/Serial No.:** 60/738,225

**Title:** FUSING OR REGISTER  
OPERATIONS, MERGING, STATUS  
FLAG UPDATES, BRANCHES

**Filed:** 11/18/2005

**Applicant:** Sun Microsystems, Inc.

**Reference No:** 33227/286001; SUN080680-US-PSP

**65. Patent Application/Serial No.:** 60/744,592

**Title:** IMPROVED PREFETCH HARDWARE  
EFFICIENCY VIA PREFETCH HINT  
INSTRUCTIONS

**Filed:** 4/10/2006

**Applicant:** Sun Microsystems, Inc.

**Reference No:** 33227/287001; SUN080673-US-PSP

**66. Patent Application/Serial No.:** 60/743,560

**Title:** IMPROVED PREFETCH HARDWARE EFFICIENCY VIA PREFETCH HINT INSTRUCTIONS

**Filed:** 3/20/2006

**Applicant:** Sun Microsystems, Inc.

**Reference No:** 33227/288001; SUN080672-US-PSP

**67. Patent Application/Serial No.:** 60/731,969

**Title:** INSTRUCTIONS GIVING HINTS TO THE HARDWARE PREFETCHER FOR MORE EFFICIENT PREDICTION OF PREFETCHES

**Filed:** 10/31/2005

**Applicant:** Sun Microsystems, Inc.

**Reference No:** 33227/289001; SUN080665-US-PSP

**68. Patent Application/Serial No.:** 60/757,240

**Title:** EXTENDED RESOURCE CREDIT SCHEME TO SUPPORT DYNAMIC REASSIGNMENT OF RESOURCES AMONG DATA PRODUCERS

**Filed:** 1/9/2006

**Applicant:** Sun Microsystems, Inc.

**Reference No:** 33227/290001; SUN080682-US-PSP

**69. Patent Application/Serial No.:** 60/731,967

**Title:** SYNCHRONIZED REGISTER  
RENAMING BY A MASTER  
PROCESSOR AND A COPROCESSOR

**Filed:** 10/31/2005

**Applicant:** Sun Microsystems, Inc.

**Reference No:** 33227/291001; SUN080668-US-PSP

**70. Patent Application/Serial No.:** 60/749,962

**Title:** SOFTWARE HINT TO SPECIFY THE  
PREFETCH BRANCH PREDICTION  
TO USE FOR A BRANCH  
INSTRUCTION

**Filed:** 12/12/2005

**Applicant:** Sun Microsystems, Inc.

**Reference No:** 33227/292001; SUN080656-US-PSP

**71. Patent Application/Serial No.:** 60/721,818

**Title:** SOFTWARE HINT TO SPECIFY THE  
PREFETCH BRANCH PREDICTION  
TO USE FOR A BRANCH  
INSTRUCTION

**Filed:** 9/29/2005

**Applicant:** Sun Microsystems, Inc.

**Reference No:** 33227/293001; SUN080653-US-PSP

**72. Patent Application/Serial No.:** 11/777,074

**Title:** MEMORY CELLS WITH POWER SWITCH CIRCUIT FOR IMPROVED LOW VOLTAGE OPERATION

**Filed:** 7/12/2007

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 021198/0009

**Reference No:** 33227/348001; SUN080722-US-NP

**73. Patent Application/Serial No.:** 60/746,049

**Title:** REDUCED POWER CACHE MEMORY WITH PER-SECTOR POWER CONTROL

**Filed:** 4/30/2006

**Applicant:** Sun Microsystems, Inc.

**Reference No:** 33227/298001; SUN080710-US-PSP

**74. Patent Application/Serial No.:** 11/740,901

**Title:** REDUCED-POWER MEMORY WITH PER-SECTOR POWER/GROUND CONTROL AND EARLY ADDRESS

**Filed:** 4/26/2007

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 021731/0700

**Reference No:** 33227/298002; SUN080710-US-NP

**75. Patent Application/Serial No.:** 60/747,200  
**Title:** REDUCED POWER CACHE MEMORY WITH PER-SECTOR POWER CONTROL  
**Filed:** 5/14/2006  
**Applicant:** Sun Microsystems, Inc.  
**Reference No:** 33227/299001; SUN080685-US-PSP

**76. Patent Application/Serial No.:** 60/747,818  
**Title:** RE-FETCHING CACHE MEMORY  
**Filed:** 5/22/2006  
**Applicant:** Sun Microsystems, Inc.  
**Reference No:** 33227/300001; SUN080688-US-PSP

**77. Patent Application/Serial No.:** 60/803,367  
**Title:** RE-FETCHING CACHE MEMORY  
**Filed:** 5/28/2006  
**Applicant:** Sun Microsystems, Inc.  
**Reference No:** 33227/301001; SUN080689-US-PSP

**78. Patent Application/Serial No.:** 60/804,085  
**Title:** APPLICATION-DIRECTED RANK COALESCING FOR MEMORY POWER MANAGEMENT  
**Filed:** 6/6/2006  
**Applicant:** Sun Microsystems, Inc.  
**Reference No:** 33227/302001; SUN080686-US-PSP

**79. Patent Application/Serial No.:** 60/888,011

**Title:** MEMORY CELLS WITH POWER SWITCH FOR WRITE OPERATIONS

**Filed:** 2/2/2007

**Applicant:** Sun Microsystems, Inc.

**Reference No:** 33227/306001; SUN080720-US-PSP

**80. Patent Application/Serial No.:** 11/932,699

**Title:** MEMORY CELL WITH INTERNAL POWER SWITCH

**Filed:** 10/31/2007

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 020957/0434

**Reference No:** 33227/306002; SUN080720-US-NP

**81. Patent Application/Serial No.:** 11/932,738

**Title:** METHOD OF OPERATING MEMORY CELL PROVIDING INTERNAL POWER SWITCHING

**Filed:** 10/31/2007

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 020957/0434

**Reference No:** 33227/306003; SUN080720-US-NP-1

**82. Patent Application/Serial No.:** 11/764,159

**Title:** SYMMETRICAL DIFFERENTIAL AMPLIFIER

**Filed:** 6/15/2007

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 020957/0434

**Reference No:** 33227/908001; SUN080742

**83. Patent Application/Serial No.:** 11/751,949

**Title:** RE-FETCHING CACHE MEMORY ENABLING LOW-POWER MODES

**Filed:** 5/22/2007

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 021731/0700

**Reference No:** 33227/279004; SUN080689-US-NP-1

**84. Patent Application/Serial No.:** 11/751,973

**Title:** RE-FETCHING CACHE MEMORY ENABLING ALTERNATIVE OPERATIONAL MODES

**Filed:** 5/22/2007

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 021731/0700

**Reference No:** 33227/279005; SUN080688-US-NP-2

**85. Patent Application/Serial No.:** 11/751,985

**Title:** RE-FETCHING CACHE MEMORY HAVING COHERENT RE-FETCHING

**Filed:** 5/22/2007

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 021731/0700

**Reference No:** 33227/279006; SUN080688-US-NP-3

**86. Patent Application/Serial No.:** 12/030,855

**Title:** VERSIONING CACHE CIRCUIT PARTICIPATING IN A CACHE HIERARCHY

**Filed:** 2/13/2008

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 020957/0434

**Reference No:** 33227/282007; SUN080742-US-CIP-13

**87. Patent Application/Serial No.:** 11/555,258

**Title:** SYNCHRONIZED REGISTER RENAMING IN A MULTIPROCESSOR

**Filed:** 10/31/2006

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 012501/0661 (Inventors to Elan)  
017089/0214 (Elan to Montalvo)  
021731/0700 (Montalvo to Sun)

**Reference No:** 33227/291002; SUN080668-US-NP-1

**88. Patent Application/Serial No.:** 11/555,263

**Title:** SYNCHRONIZED REGISTER  
RENAMING IN A MULTIPROCESSOR

**Filed:** 10/31/2006

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 020957/0434

**Reference No:** 33227/291003; SUN080668

**89. Patent Application/Serial No.:** 60/741,724

**Title:** MICROARCHITECTURE FOR  
COMPRESSED STORAGE OF  
OPERATIONS WITH EMBEDDED  
CONSTANTS

**Filed:** 12/2/2005

**Applicant:** Sun Microsystems, Inc.

**Reference No:** 33227/294001; SUN080681-US-PSP

**90. Patent Application/Serial No.:** 60/744,010

**Title:** SOFTWARE-ASSISTED THREAD  
MIGRATION BETWEEN MULTIPLE  
CORES

**Filed:** 3/30/2006

**Applicant:** Sun Microsystems, Inc.

**Reference No:** 33227/295001; SUN080701-US-PSP

**91. Patent Application/Serial No.:** 60/781,772  
**Title:** SOFTWARE-ASSISTED THREAD MIGRATION BETWEEN MULTIPLE CORES  
**Filed:** 3/13/2006  
**Applicant:** Sun Microsystems, Inc.  
**Reference No:** 33227/296001; SUN080684-US-PSP

**92. Patent Application/Serial No.:** 60/832,847  
**Title:** LOW POWER SRAM FOR A DUAL PROCESSOR SYSTEM  
**Filed:** 7/23/2006  
**Applicant:** Sun Microsystems, Inc.  
**Reference No:** 33227/297001; SUN090008-US-PSP

**93. Patent Application/Serial No.:** 60/731,785  
**Title:** MAINTAINING MEMORY COHERENCY WITHIN A TRACE CACHE  
**Filed:** 10/31/2005  
**Applicant:** Sun Microsystems, Inc.  
**Reference No:** 33227/284001; SUN080667-US-PSP

**94. Patent Application/Serial No.:** 60/889,547  
**Title:** INSTRUCTION SUB-TYPE TRACKING UNIT  
**Filed:** 2/13/2007  
**Applicant:** Sun Microsystems, Inc.  
**Reference No:** 33227/282001; SUN080692-US-PSP

**95. Patent Application/Serial No.:** 11/279,882

**Title:** MECHANISMS FOR SOFTWARE (OS)  
TO CONTROL THREADS BETWEEN  
MULTIPLE CORES

**Filed:** 04/15/2006

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 018161/0814

**Reference No:** 33227/296002; SUN080684-US-NP-1

**96. Patent Application/Serial No.:** 11/279,883

**Title:** OBJECTIVE-DIRECTED  
MECHANISMS FOR SOFTWARE (OS)  
TO CONTROL THREAD MIGRATION

**Filed:** 04/15/2006

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 018161/0814

**Reference No:** 33227/296003; SUN080684-US-NP-2

**97. Patent Application/Serial No.:** 11/566,206

**Patent No.:** 7,389,408

**Title:** MICROARCHITECTURE FOR  
COMPACT STORAGE OF EMBEDDED  
CONSTANTS

**Filed:** 12/01/2006

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 020925/0679

**Reference No:** 33227/294002; SUN080681-US-NP

**98. Patent Application/Serial No.:** 11/782,180

**Title:** TRACE VERIFICATION SYSTEM  
AND METHOD FOR AN  
INSTRUCTION PROCESSING  
CIRCUIT

**Filed:** 07/24/2007

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 020957/0434

**Reference No:** 33227/283014; SUN080652-US-CIP-1

**99. Patent Application/Serial No.:** 11/782,238

**Title:** METHOD AND SYSTEM FOR  
UTILIZING A COMMON STRUCTURE  
FOR TRACE VERIFICATION AND  
MAINTAINING COHERENCY IN AN  
INSTRUCTION PROCESSING  
CIRCUIT

**Filed:** 07/24/2007

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 020957/0434

**Reference No:** 33227/283015; SUN080652-US-CIP-2

**100. Patent Application/Serial No.:** 11/880,861

**Title:** TRACE UNIT WITH A TRACE  
BUILDER

**Filed:** 07/23/2007

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 020957/0434

**Reference No:** 33227/283013; SUN080652-US-CIP-3

**101.**      **Patent Application/Serial No.:** 11/880,859  
                 **Title:** CONCURRENT VS LOW POWER  
                  BRANCH PREDICTION  
                 **Filed:** 07/23/2007  
                 **Applicant:** Sun Microsystems, Inc.  
                 **Reel/Frame No.:** 020957/0434  
                 **Reference No:** 33227/283011; SUN080750-US-CIP-1

**102.**      **Patent Application/Serial No.:** 11/880,863  
                 **Title:** TRACE UNIT WITH AN OP PATH  
                  FROM A DECODER (BYPASS  
                  MODE) AND FROM A BASIC-  
                  BLOCK BUILDER  
                 **Filed:** 07/23/2007  
                 **Applicant:** Sun Microsystems, Inc.  
                 **Reel/Frame No.:** 020957/0434  
                 **Reference No:** 33227/283010; SUN080746-US-CIP-1

**103.**      **Patent Application/Serial No.:** 12/030,865  
                 **Title:** TRACE-BASED STORE  
                  OPERATION BUFFER  
                 **Filed:** 02/13/2008  
                 **Applicant:** Sun Microsystems, Inc.  
                 **Reel/Frame No.:** 020957/0434  
                 **Reference No:** 33227/282011; SUN080742-US-CIP-14

**104.**      **Patent Application/Serial No.:** 12/030,862  
                 **Title:** CHECKING FOR A MEMORY  
                  ORDERING VIOLATION AFTER A  
                  SPECULATIVE CACHE WRITE  
                 **Filed:** 02/13/2008  
                 **Applicant:** Sun Microsystems, Inc.  
                 **Reel/Frame No.:** 020957/0434  
                 **Reference No:** 33227/282010; SUN080742-US-CIP-11

**105.**      **Patent Application/Serial No.:** 12/030,859  
                 **Title:** ROLLING BACK A SPECULATIVE  
                  UPDATE OF A NON-MODIFIABLE  
                  CACHE LINE  
                 **Filed:** 02/13/2008  
                 **Applicant:** Sun Microsystems, Inc.  
                 **Reel/Frame No.:** 020957/0434  
                 **Reference No:** 33227/282009; SUN080742-US-CIP-12

**106.**      **Patent Application/Serial No.:** 12/030,858  
                 **Title:** CACHE ROLLBACK  
                  ACCELERATION VIA A BANK  
                  BASED VERSIONING CACHE  
                  CIRCUIT  
                 **Filed:** 02/13/2008  
                 **Applicant:** Sun Microsystems, Inc.  
                 **Reel/Frame No.:** 020957/0434  
                 **Reference No:** 33227/282008; SUN080742-US-CIP-16

**107.**      **Patent Application/Serial No.:** 11/941,895  
                 **Title:** METHOD AND SYSTEM FOR PROMOTING TRACES IN AN INSTRUCTION PROCESSING CIRCUIT  
                 **Filed:** 11/16/2007  
                 **Applicant:** Sun Microsystems, Inc.  
                 **Reel/Frame No.:** 020957/0434  
                 **Reference No:** 33227/271003; SUN080652-US-DIV-1

**108.**      **Patent Application/Serial No.:** 11/941,883  
                 **Title:** METHOD AND SYSTEM FOR PROMOTING TRACES IN AN INSTRUCTION PROCESSING CIRCUIT  
                 **Filed:** 11/16/2007  
                 **Applicant:** Sun Microsystems, Inc.  
                 **Reel/Frame No.:** 020957/0434  
                 **Reference No:** 33227/271002; SUN080652-US-CIP-4

**109.**      **Patent Application/Serial No.:** 11/880,875  
                 **Title:** INSTRUCTION CACHE, DECODER CIRCUIT, BASIC BLOCK CACHE CIRCUIT AND MULTI-BLOCK CACHE CIRCUIT  
                 **Filed:** 07/23/2007  
                 **Applicant:** Sun Microsystems, Inc.  
                 **Reel/Frame No.:** 020957/0434  
                 **Reference No:** 33227/285008; SUN080751-US-CIP-1

**110. Patent Application/Serial No.:** 11/880,864

**Title:** FRONT END PROCESSOR CORE SUPPORTING MULTIPLE BACK END EXECUTION UNITS SHARING A BASIC BLOCK BUILDER

**Filed:** 07/23/2007

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 020957/0434

**Reference No:** 33227/285007; SUN080749-US-CIP-1

**111. Patent Application/Serial No.:** 11/933,267

**Title:** VIRTUAL CORE MANAGEMENT

**Filed:** 10/31/2007

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 020957/0434

**Reference No:** 33227/259005; SUN080835-US-DIV-2

**112. Patent Application/Serial No.:** 11/933,297

**Title:** VIRTUAL CORE MANAGEMENT

**Filed:** 10/31/2007

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 020957/0434

**Reference No:** 33227/259006; SUN080835-US-DIV-3

**113.**      **Patent Application/Serial No.:** 11/933,319  
                 **Title:** VIRTUAL CORE MANAGEMENT  
                 **Filed:** 10/31/2007  
                 **Applicant:** Sun Microsystems, Inc.  
                 **Reel/Frame No.:** 020957/0434  
                 **Reference No:** 33227/259007; SUN080835-US-DIV-4

**114.**      **Patent Application/Serial No.:** 11/933,333  
                 **Title:** VIRTUAL CORE MANAGEMENT  
                 **Filed:** 10/31/2007  
                 **Applicant:** Sun Microsystems, Inc.  
                 **Reel/Frame No.:** 020957/0434  
                 **Reference No:** 33227/259008; SUN080835-US-DIV-5

**115.**      **Patent Application/Serial No.:** 11/933,349  
                 **Title:** VIRTUAL CORE MANAGEMENT  
                 **Filed:** 10/31/2007  
                 **Applicant:** Sun Microsystems, Inc.  
                 **Reel/Frame No.:** 020957/0434  
                 **Reference No:** 33227/259009; SUN080835-US-DIV-6

**116.**      **Patent Application/Serial No.:** 11/933,199  
                 **Title:** VIRTUAL CORE MANAGEMENT  
                 **Filed:** 10/31/2007  
                 **Applicant:** Sun Microsystems, Inc.  
                 **Reel/Frame No.:** 020957/0434  
                 **Reference No:** 33227/259004; SUN080835-US-DIV-1

**117.**      **Patent Application/Serial No.:** 11/932,555  
                 **Title:** MEMORY DEVICE WITH SPLIT  
                 POWER SWITCH  
                 **Filed:** 10/31/2007  
                 **Applicant:** Sun Microsystems, Inc.  
                 **Reel/Frame No.:** 021171/0578  
                 **Reference No:** 33227/349002; SUN080719-US-NP

**118.**      **Patent Application/Serial No.:** 60/888,006  
                 **Title:** SPLIT POWER SWITCH FOR  
                 MEMORY CELLS  
                 **Filed:** 02/02/2007  
                 **Applicant:** Sun Microsystems, Inc.  
                 **Reel/Frame No.:** 021731/0700  
                 **Reference No:** 33227/349001; SUN080719-US-PSP

**119.**      **Patent Application/Serial No.:** 11/932,643  
                 **Title:** METHOD OF SELECTIVELY  
                 POWERING MEMORY DEVICE  
                 **Filed:** 10/31/2007  
                 **Applicant:** Sun Microsystems, Inc.  
                 **Reel/Frame No.:** 021171/0578  
                 **Reference No:** 33227/349003; SUN080719-US-NP-1

**120.**      **Patent Application/Serial No.:** 11/932,967  
                 **Title:** ELECTRIC POWER FOR READ  
                 AND WRITE MARGINS  
                 **Filed:** 10/31/2007  
                 **Applicant:** Sun Microsystems, Inc.  
                 **Reel/Frame No.:** 021171/0578  
                 **Reference No:** 33227/349004; SUN080721-US-NP

**121.**      **Patent Application/Serial No.:** 11/938,196  
                 **Title:** ELECTRIC POWER FOR READ  
                 MARGINS  
                 **Filed:** 11/09/2007  
                 **Applicant:** Sun Microsystems, Inc.  
                 **Reel/Frame No.:** 021171/0578  
                 **Reference No:** 33227/349005; SUN080721-US-CNT-1

**122.**      **Patent Application/Serial No.:** 11/555,253  
                 **Title:** DYNAMIC RESOURCE ALLOCATION  
                 **Filed:** 10/31/2006  
                 **Applicant:** Sun Microsystems, Inc.  
                 **Reel/Frame No.:** 020957/0434  
                 **Reference No:** 33227/225001; SUN080668

**123.**      **Patent Application/Serial No.:** 11/555,181  
                 **Title:** SELECTIVE REGISTER FILE DISABLEMENT  
                 **Filed:** 10/31/2006  
                 **Applicant:** Sun Microsystems, Inc.  
                 **Reel/Frame No.:** 020957/0434  
                 **Reference No:** 33227/223001; SUN080662

**124.**      **Patent Application/Serial No.:** 11/740,892  
                 **Patent No.:** 7,443,759  
                 **Title:** REDUCED-POWER MEMORY WITH PER-SECTOR GROUND CONTROL  
                 **Filed:** 04/26/2007  
                 **Applicant:** Sun Microsystems, Inc.  
                 **Reel/Frame No.:** 021731/0700  
                 **Reference No:** 33227/222001; SUN080685

**125.**      **Patent Application/Serial No.:** 60/731,784  
                 **Title:** EXTEND CACHE OPERATIONS  
                  TO PROVIDE CONTROL OVER  
                  WHICH LEVELS OF THE  
                  HIERARCHY THEY APPLY TO  
                 **Filed:** 10/31/2005  
                 **Applicant:** Sun Microsystems, Inc.  
                 **Reference No:** 33227/304001; SUN080666-US-PSP

**126.**      **Patent Application/Serial No.:** 11/543,549  
                 **Title:** CACHE INSTRUCTIONS WITH  
                  HIERARCHY CONTROL  
                 **Filed:** 10/04/2006  
                 **Applicant:** Sun Microsystems, Inc.  
                 **Reel/Frame No.:** 020957/0434  
                 **Reference No:** 33227/304002; SUN080666-US-NP-2

**127.**      **Patent Application/Serial No.:** 11/543,598  
                 **Title:** CACHE OPERATIONS WITH  
                  HIERARCHY CONTROL  
                 **Filed:** 10/04/2006  
                 **Applicant:** Sun Microsystems, Inc.  
                 **Reel/Frame No.:** 020957/0434  
                 **Reference No:** 33227/304003; SUN080666-US-NP-1

**128.**      **Patent Application/Serial No.:** 11/737,103  
                 **Title:** NAND/NOR REGISTERS  
                 **Filed:** 04/18/2007  
                 **Applicant:** Sun Microsystems, Inc.  
                 **Reel/Frame No.:** 020957/0434  
                 **Reference No:** 33227/305001; SUN080820-UP-US

**129.**      **Patent Application/Serial No.:** 60/729,558

**Title:** TIMED PAUSE INSTRUCTION  
                         FOR MORE POWER EFFICIENT  
                         HANDLING OF MICRODELAYS IN  
                         SOFTWARE

**Filed:** 10/24/2005

**Applicant:** Sun Microsystems, Inc.

**Reference No:** 33227/310001; SUN080659-US-PSP

**130.**      **Patent Application/Serial No.:** 11/552,329

**Title:** TIMED PAUSE INSTRUCTIONS

**Filed:** 10/24/2006

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 020975/0434

**Reference No:** 33227/310002; SUN080659-US-NP

**131.**      **Patent Application/Serial No.:** 11/616,093

**Title:** TIMED PAUSE INSTRUCTION SET

**Filed:** 12/26/2006

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 020975/0434

**Reference No:** 33227/310003; SUN080659-US-CNT-1

**132.**      **Patent Application/Serial No.:** 11/759,218  
                 **Title:** ASSOCIATE STRUCTURE RANK  
                  COUNTERS  
                 **Filed:** 6/6/2007  
                 **Applicant:** Sun Microsystems, Inc.  
                 **Reel/Frame No.:** 017518/0150  
                 **Reference No:** 33227/279007; SUN080686-US-NP-3

**133.**      **Patent Application/Serial No.:** 11/880,882  
                 **Title:** TRACE UNIT  
                 **Filed:** 7/23/2007  
                 **Applicant:** Sun Microsystems, Inc.  
                 **Reel/Frame No.:** 020378/0239  
                 **Reference No:** 33227/283012; SUN080754-US-CIP-1

**134.**      **Patent Application/Serial No.:** 11/880,877  
                 **Title:** TRACE VERIFICATION SYSTEM  
                  AND METHOD FOR AN  
                  INSTRUCTION PROCESSING  
                  CIRCUIT  
                 **Filed:** 7/23/2007  
                 **Applicant:** Sun Microsystems, Inc.  
                 **Reel/Frame No.:** 020378/0239  
                 **Reference No:** 33227/283016

**135. Patent Application/Serial No.:** 11/591,024  
**Title:** MAINTAINING MEMORY COHERENCY WITH A TRACE CACHE  
**Filed:** 10/31/2006  
**Applicant:** Sun Microsystems, Inc.  
**Reel/Frame No.:** 020957/0434  
**Reference No:** 33227/284002; SUN080667-US-NP

**136. Patent Application/Serial No.:** 11/561,270  
**Title:** FUSING OPERATIONS OF A TARGET ARCHITECTURE OPERATION SET  
**Filed:** 11/17/2006  
**Applicant:** Sun Microsystems, Inc.  
**Reel/Frame No.:** 018887/0263  
**Reference No:** 33227/353001; SUN080680-US-NP-1

**137. Patent Application/Serial No.:** 11/561,274  
**Title:** TRACE OPTIMIZATION VIA FUSING OPERATIONS OF TARGET ARCHITECTURE OPERATION SET  
**Filed:** 11/17/2006  
**Applicant:** Sun Microsystems, Inc.  
**Reel/Frame No.:** 018887/0263  
**Reference No:** 33227/354001; SUN080680-US-NP-2

**138. Patent Application/Serial No.:** 11/561,284

**Title:** FUSING ASSERT OPERATIONS OF A TARGET ARCHITECTURE OPERATION SET

**Filed:** 11/17/2006

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 018887/0263

**Reference No:** 33227/355001; SUN080680-US-NP-4

**139. Patent Application/Serial No.:** 11/759,217

**Title:** PHYSICAL MEMORY ALLOCATING ACCORDING TO RANKS

**Filed:** 6/6/2007

**Applicant:** Sun Microsystems, Inc.

**Reference No:** 33227/327001; SUN080686-US-NP-2

**140.**      **Patent Application/Serial No.:** 11/759,216  
                 **Title:** SOFTWARE DIRECTED RANK  
                 COALESCING  
                 **Filed:** 6/6/2007  
                 **Applicant:** Sun Microsystems, Inc.  
                 **Reel/Frame No.:** 020669/0050  
                 **Reference No:** 33227/328001; SUN080686-US-NP-1

**141.**      **Patent Application/Serial No.:** 09/680,672  
                 **Patent No.:** 6,502,202  
                 **Title:** SELF-ADJUSTING MULTI-SPEED  
                 PIPELINE  
                 **Filed:** 10/6/2000  
                 **Applicant:** Sun Microsystems, Inc.  
                 **Reel/Frame No.:** 011192/0610  
                 **Reference No:** 33227/329001; SUN080800-US-NP

**142.**      **Patent Application/Serial No.:** 09/661,137  
                 **Title:** REPAIRABLE DYNAMIC  
                 PROGRAMMABLE LOGIC ARRAY  
                 **Filed:** 9/13/2000  
                 **Applicant:** Sun Microsystems, Inc.  
                 **Reel/Frame No.:** 011222/0881  
                 **Reference No:** 33227/330001; SUN080799-US-NP

**143.**      **Patent Application/Serial No.:** 09/640,486  
                 **Title:** CONFIGURABLE DYNAMIC  
                 PROGRAMMABLE LOGIC ARRAY  
                 **Filed:** 8/16/2000  
                 **Applicant:** Sun Microsystems, Inc.  
                 **Reel/Frame No.:** 011150/0664  
                 **Reference No:** 33227/331001; SUN080798-US-NP

**144.**      **Patent Application/Serial No.:** 10/071,966  
                 **Patent No.:** 6,614,258  
                 **Title:** FIELD-PROGRAMMABLE  
                 DYNAMIC LOGIC ARRAY  
                 **Filed:** 2/5/2002  
                 **Applicant:** Sun Microsystems, Inc.  
                 **Reel/Frame No.:** 012596/0994  
                 **Reference No:** 33227/332001; SUN080797-US-CIP

**145.**      **Patent Application/Serial No.:** 09/609,490  
                 **Patent No.:** 6,348,812  
                 **Title:** DYNAMIC PROGRAMMABLE  
                 LOGIC ARRAY THAT CAN BE  
                 REPROGRAMMED AND A  
                 METHOD OF USE  
                 **Filed:** 7/5/2000  
                 **Applicant:** Sun Microsystems, Inc.  
                 **Reel/Frame No.:** 010915/0302  
                 **Reference No:** 33227/333001; SUN080796-US-NP

**146.**      **Patent Application/Serial No.:** 10/054,471  
                 **Patent No.:** 6,894,534  
                 **Title:** DYNAMIC PROGRAMMABLE LOGIC ARRAY THAT CAN BE REPROGRAMMED AND A METHOD OF USE  
                 **Filed:** 1/18/2002  
                 **Applicant:** Sun Microsystems, Inc.  
                 **Reel/Frame No.:** 012552/0065  
                 **Reference No:** 33227/334001; SUN080795-US-CIP

**147.**      **Patent Application/Serial No.:** 09/566,901  
                 **Patent No.:** 6,542,958  
                 **Title:** SOFTWARE CONTROL OF DRAM REFRESH TO REDUCE POWER CONSUMPTION IN A DATA PROCESSING SYSTEM  
                 **Filed:** 5/10/2000  
                 **Applicant:** Sun Microsystems, Inc.  
                 **Reel/Frame No.:** 010789/0532  
                 **Reference No:** 33227/335001; SUN080794-US-NP

**148.**      **Patent Application/Serial No.:** 11/932,311  
                 **Title:** DYNAMIC VOLTAGE SCALING FOR SELF-TIMED OR RACING PATHS  
                 **Filed:** 10/31/2007  
                 **Applicant:** Sun Microsystems, Inc.  
                 **Reel/Frame No.:** 020957/0434  
                 **Reference No:** 33227/336001; SUN080757-US-NP

**149. Patent Application/Serial No.:** 11/435,528  
**Title:** SYSTEM AND METHOD FOR  
PROCESSING INSTRUCTIONS IN  
A COMPUTER SYSTEM  
**Filed:** 5/17/2006  
**Applicant:** Sun Microsystems, Inc.  
**Reel/Frame No.:** 017910/0029  
**Reference No.:** 33227/337001; SUN080756-US-NP

**150. Patent Application/Serial No.:** 11/408,784

**Title:** REDUCING POWER CONSUMPTION FOR PROCESSING OF COMMON VALUES IN MICROPROCESSOR REGISTERS AND EXECUTION UNITS

**Filed:** 4/21/2006

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 017801/0323

**Reference No.:** 33227/338001; SUN080755-US-NP

**151.** **Patent Application/Serial No.:** 10/045,127  
**Patent No.:** 6,848,025  
**Title:** METHOD AND SYSTEM FOR PROGRAMMABLE REPLACEMENT MECHANISM FOR CACHING DEVICES  
**Filed:** 10/26/2001  
**Applicant:** Sun Microsystems, Inc.  
**Reel/Frame No.:** 012501/0661 (Inventors to Elan)  
017089/0214 (Elan to Montalvo)  
021731/0700 (Montalvo to Sun)  
**Reference No.:** 33227/339001; SUN080802-US-NP

**152.**      **Patent Application/Serial No.:** 10/004,338  
                 **Patent No.:** 6,957,323  
**Title:** OPERAND FILE USING  
POINTERS AND REFERENCES  
COUNTERS AND A METHOD OF  
USE  
**Filed:** 11/14/2001  
**Applicant:** Sun Microsystems, Inc.  
**Reel/Frame No.:** 012356/0083 (Inventors to Elan)  
                  017089/0214 (Elan to Montalvo)  
                  021731/0700 (Montalvo to Sun)  
**Reference No:** 33227/340001; SUN080801-US-NP

**153.**      **Patent Application/Serial No.:** 11/738,287  
**Title:** DYNAMIC DUAL OUTPUT  
LATCH  
**Filed:** 4/20/2007  
**Applicant:** Sun Microsystems, Inc.  
**Reel/Frame No.:** 020957/0434  
**Reference No:** 33227/341001; SUN080821-US-NP

**154.**      **Patent Application/Serial No.:** 11/490,778  
**Title:** MECHANISM TO PROVIDE  
SOFTWARE ACCESS TO  
PHYSICAL MEMORY IN A  
PROCESSING SYSTEM  
**Filed:** 7/21/2006  
**Applicant:** Sun Microsystems, Inc.  
**Reel/Frame No.:** 020421/0790  
**Reference No:** 33227/342001; SUN080833-US-NP

**155.**      **Patent Application/Serial No.:** 11/963,603  
                 **Title:** MICROPROCESSOR INCLUDING  
                  A DISPLAY INTERFACE IN THE  
                  MICROPROCESSOR  
                 **Filed:** 12/21/2007  
                 **Applicant:** Sun Microsystems, Inc.  
                 **Reel/Frame No.:** 020957/0434  
                 **Reference No:** 33227/343001; SUN080827-US-NP

**156.**      **Patent Application/Serial No.:** 11/963,579  
                 **Title:** MICROPROCESSOR INCLUDING  
                  A DISPLAY INTERFACE IN THE  
                  MICROPROCESSOR  
                 **Filed:** 12/21/2007  
                 **Applicant:** Sun Microsystems, Inc.  
                 **Reel/Frame No.:** 020957/0434  
                 **Reference No:** 33227/344001; SUN080826-US-NP

**157.**      **Patent Application/Serial No.:** 11/745,370  
                 **Title:** ENHANCED SIGNALING  
                  SENSITIVITY USING  
                  MULTIPLE REFERENCES  
                 **Filed:** 5/7/2007  
                 **Applicant:** Sun Microsystems, Inc.  
                 **Reel/Frame No.:** 020957/0434  
                 **Reference No:** 33227/345001; SUN080834-US-NP

**158.**      **Patent Application/Serial No.:** 11/416,872  
                 **Title:** SYSTEM AND METHOD FOR  
                 OPTIMIZING A MEMORY  
                 CONTROLLER  
                 **Filed:** 5/2/2006  
                 **Applicant:** Sun Microsystems, Inc.  
                 **Reel/Frame No.:** 017865/0651  
                 **Reference No:** 33227/346001; SUN080831-US-NP

**159.**      **Patent Application/Serial No.:** 11/450,103  
                 **Title:** SYSTEM AND MEHTOD FOR  
                 CONSERVING POWER  
                 **Filed:** 6/9/2006  
                 **Applicant:** Sun Microsystems, Inc.  
                 **Reel/Frame No.:** 17988/0735  
                 **Reference No:** 33227/347001; SUN080832-US-NP

**160.**      **Patent Application/Serial No.:** 60/721,817  
                 **Title:** SOFTWARE HINT TO SPECIFY  
                 PREFERRED LOAD VALUE  
                 PREDICTION MECHANISM  
                 **Filed:** 9/29/2005  
                 **Applicant:** Sun Microsystems, Inc.  
                 **Reference No:** 33227/351001; SUN080657-US-PSP

**161.**      **Patent Application/Serial No.:** 11/351,059  
                 **Title:** SOFTWARE HINT TO SPECIFY  
                 PREFERRED LOAD VALUE  
                 PREDICTION MECHANISM  
                 **Filed:** 2/9/2006  
                 **Applicant:** Sun Microsystems, Inc.  
                 **Reel/Frame No.:** 017518/0142  
                 **Reference No:** 33227/351003; SUN080657-US-NP

**162.**      **Patent Application/Serial No.:** 60/762,817  
                 **Title:** SOFTWARE HINT OT SPECIFY  
                 PREFERRED LOAD VALUE  
                 PREDICTION MECHANISM  
                 **Filed:** 1/27/2006  
                 **Applicant:** Sun Microsystems, Inc.  
                 **Reference No:** 33227/351002; SUN080658-US-PSP

**163.**      **Patent Application/Serial No.:** 60/806,786  
                 **Title:** EXECUTION MODES APPLIED  
                 TO INSTRUCTION SEQUENCES  
                 **Filed:** 7/9/2006  
                 **Applicant:** Sun Microsystems, Inc.  
                 **Reference No:** 33227/352001; SUN080687-US-PSP

**164. Patent Application/Serial No.:** 11/774,581

**Title:** EXECUTING INSTRUCTION SEQUENCES ACCORDING TO EXECUTION MODE

**Filed:** 7/7/2007

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 020750/0401

**Reference No:** 33227/352002; SUN080687-US-NP-1

**165. Patent Application/Serial No.:** 11/774,583

**Title:** CONTROLLING OPERATION OF A PROCESSOR ACCORDING TO EXECUTION MODE OF AN INSTRUCTION SEQUENCE

**Filed:** 7/7/2007

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 020750/0401

**Reference No:** 33227/352003; SUN080687-US-NP-2

**166. Patent Application/Serial No.:** 11/880,860

**Title:** MICROPROCESSOR WITH COHERENT CACHES FOR BASIC BLOCKS AND TRACES

**Filed:** 7/23/2007

**Applicant:** Sun Microsystems, Inc.

**Reference No:** 33227/356001

**167. Patent Application/Serial No.:** 11/781,942

**Title:** A TRACE UNIT WITH A DECODER, A BASIC-BLOCK CACHE, A MULTI-BLOCK CACHE, AND SEQUENCER

**Filed:** 7/23/2007

**Applicant:** Sun Microsystems, Inc.

**Reference No:** 33227/001001;SUN080745-US-CIP1

**168. Patent Application/Serial No.:** 12/030,856

**Title:** DELAYED STORE BUFFER ENTRIES TAGGED WITH TRACE IDS

**Filed:** 2/13/2008

**Applicant:** Sun Microsystems, Inc.

**Reference No:** SUN080742-US-CIP15